Questions and Teaching Points

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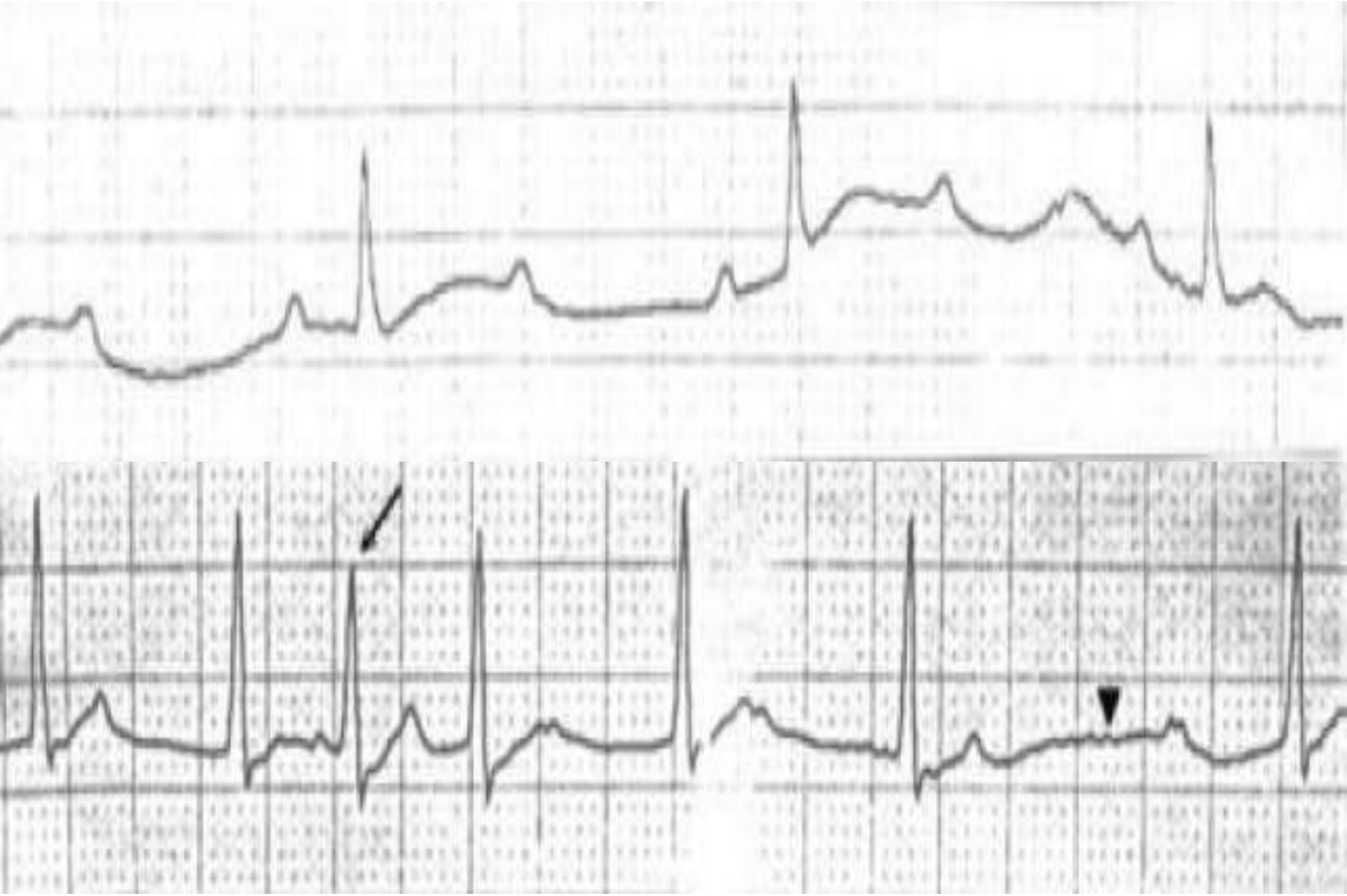
Dr. Rasha Samir
20TH
JEANS

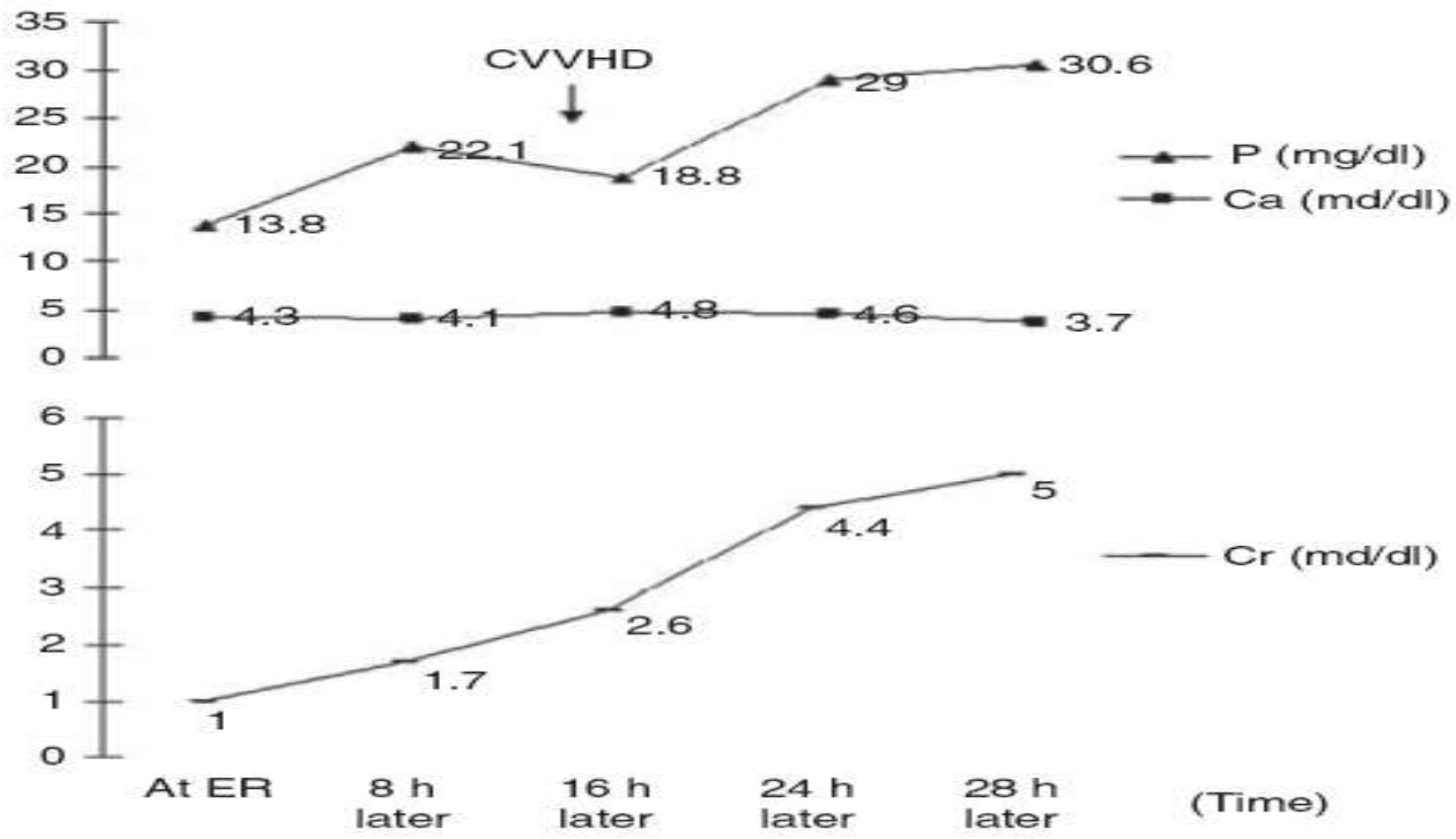


Nephrol Dial Transplant (2006) 21: 3320–3323

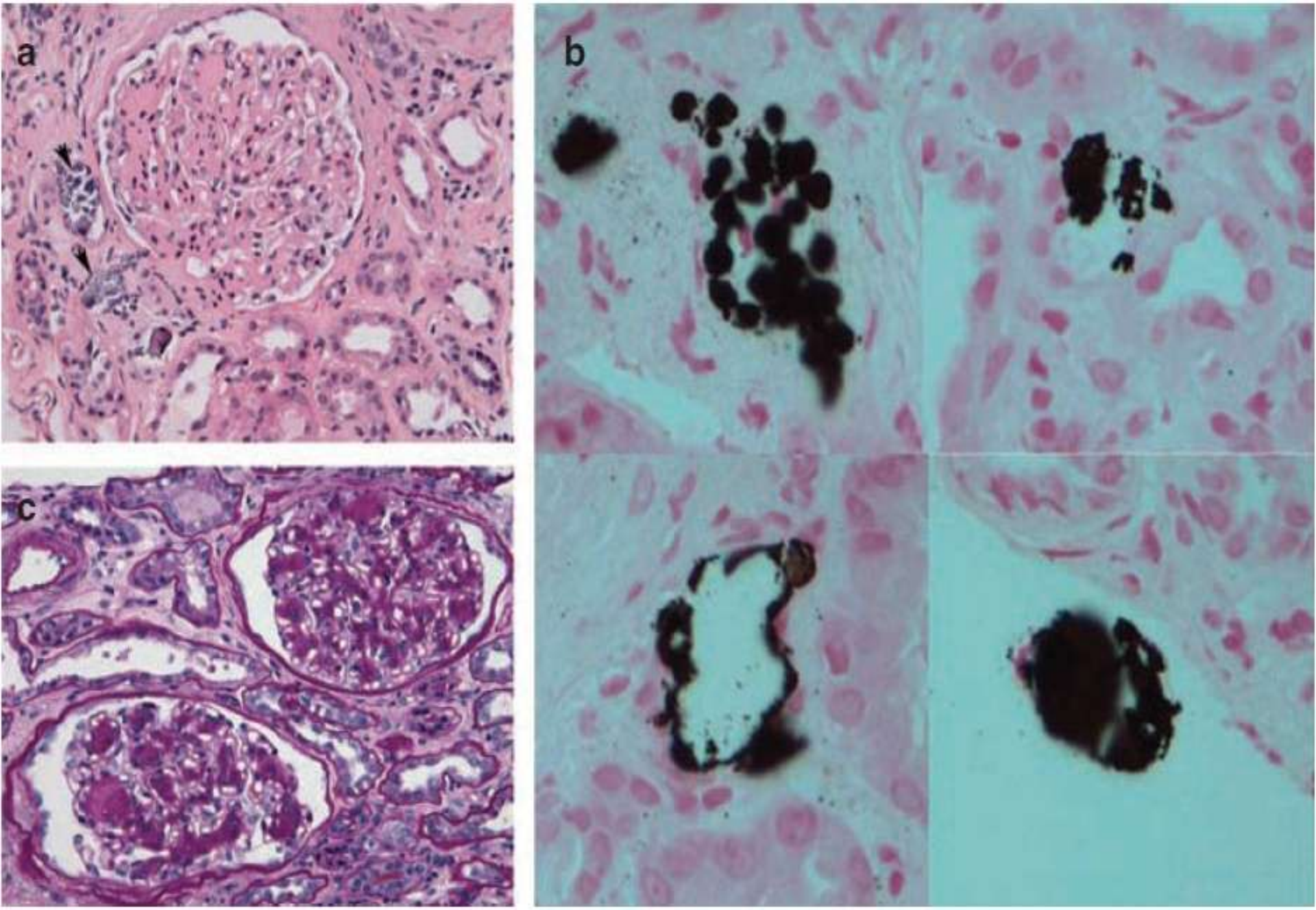
Common sources of naturally derived cardiac glycosides

Source (scientific name)	Major cardiac glycosides	Purpose
Animal-derived		
Toad (Bufo spp.)	Bufagins, bufotoxins	Cooking, Chinese medicines, aphrodisiacs
Plant-derived		
Ornamental oleander (Nerium oleander)	Oleandrin, digitalinum	Decoration, alternative medicine for insomnia
Yellow oleander (Thevetia peruviana)	Thevetin, thevetoxin	Decorative tree
Purple foxglove (Digitalis purpurea)	Digitoxin, gitaloxin, gitoxin	Extract for digitoxin, decoration
Woolly foxglove (Digitalis lanata)	Digoxin	Extract for digoxin, decoration
Lily of the valley (Convallaria majalis)	Convallatoxin	Medicinal herb for heart failure, decoration
White squill (Scilla maritime)	Scilliroside	Antitussive and expectorant
Red squill (Urginea maritime)	Scilliroside	Rat poison
Ouabain (Strophanthus gratus)	Gamma–strophanthin	Medicinal herb for heart failure and diuretic
Christmas rose (Helleborus spp)	Bufadienole, hellebrin	Laxatives, emmenagogue, anthelmintic

What is The Cause of AKI?



Kidney International (2009) 75, 993–994



Kidney International (2009) 75, 987–991

Sodium Phosphate Enemas: Complications

- **Acute renal failure:** **All**
- **Urgent hemodialysis:** **2**
- **Deaths:** **5**
- **Prolonged hospitalization:** **3/6 (survivors)**

Arch Intern Med. 2012 Feb 13;172(3):263-5.

Q2. Do You Recommend Dialysis for This Case?

- A 65-y-old male patient who suffers from diabetes and hypertension, basal serum creatinine 1.5 mg/dl. 2 days after coronary angiography serum creatinine rose to 4.5 mg/dl (no clinical overload, K 4.9 mmol/l, serum bicarb 19 meq/l)
  - Yes
  - No

Early or Late Dialysis in AKI?

	Earlier-Start Dialysis	Usual-Start Dialysis	Difference[a] (95% CI)	*P*
SUN at dialysis initiation (mg/dL)	71.7 ± 21.7	100.9 ± 32.6	+29.2 (21.8 to 36.8)	0.01
Creatinine at dialysis initiation (mg/dL)	7.4 ± 5.3	10.4 ± 3.3	+3.0 (1.8 to 4.2)	<0.001
Duration of dialysis support (d)	7.13 ± 8.58	5.30 ± 4.58	−1.8 (−3.71 to 0.05)	0.06
Recovered without dialysis	9 (8.4)	18 (16.9)	+0.08 (−0.008 to 0.17)	0.1
Indication for dialysis				
Protocol earlier start	85 (83.3)	—		
Uremic symptoms	3 (2.9)	61 (57.5)	+0.55 (0.44 to 0.64)	<0.001
Metabolic acidosis	3 (2.9)	—		
Need for transfusions	2 (1.9)	4 (3.7)	+0.01 (−0.03 to 0.07)	0.7
Hyperkalemia	1 (0.9)	7 (6.6)	+0.05 (0.002 to 0.12)	0.001
Volume overload	1 (0.9)	14 (13.2)	+0.12 (0.05 to 0.2)	0.001

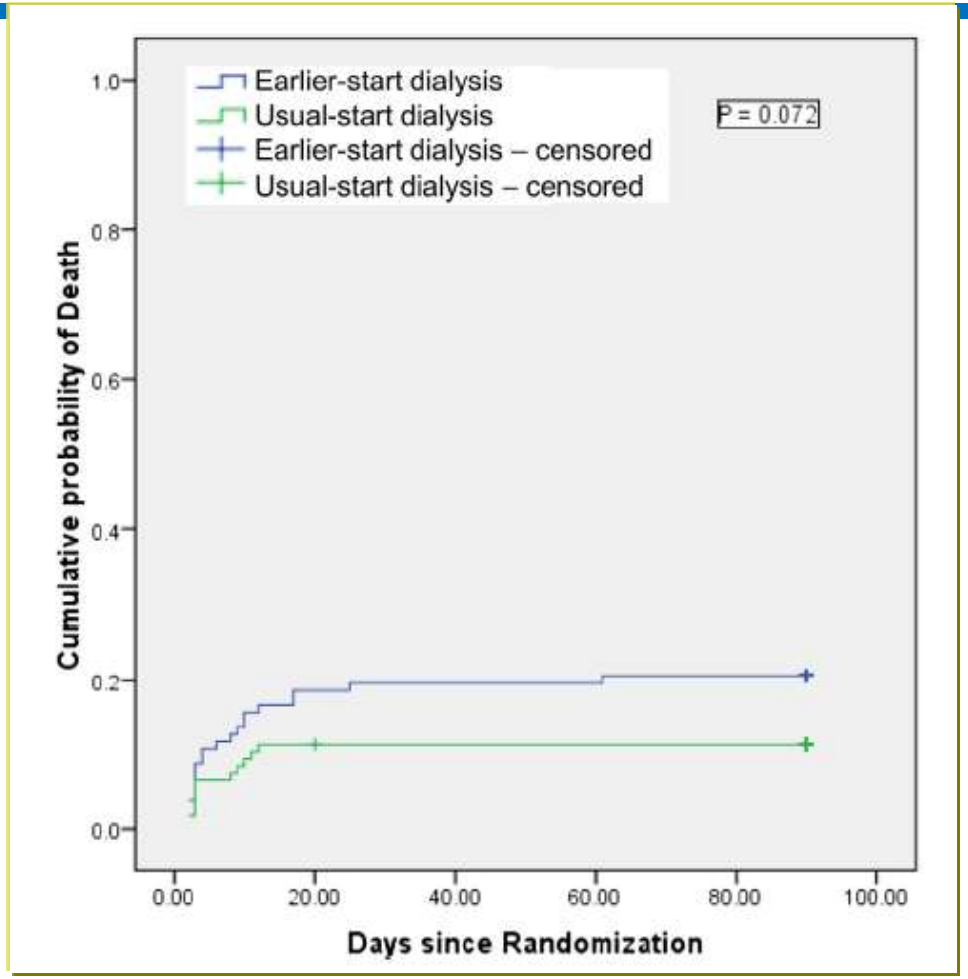
Note: Values for categorical variables are given as number (percentage); values for continuous variables are given as mean ± standard deviation.

Abbreviations: CI, confidence interval; SUN, serum urea nitrogen.

[a]Mean or proportion difference; usual-start value less earlier-start value.

Am J Kidney Dis. 2013;62(6):1116-1121

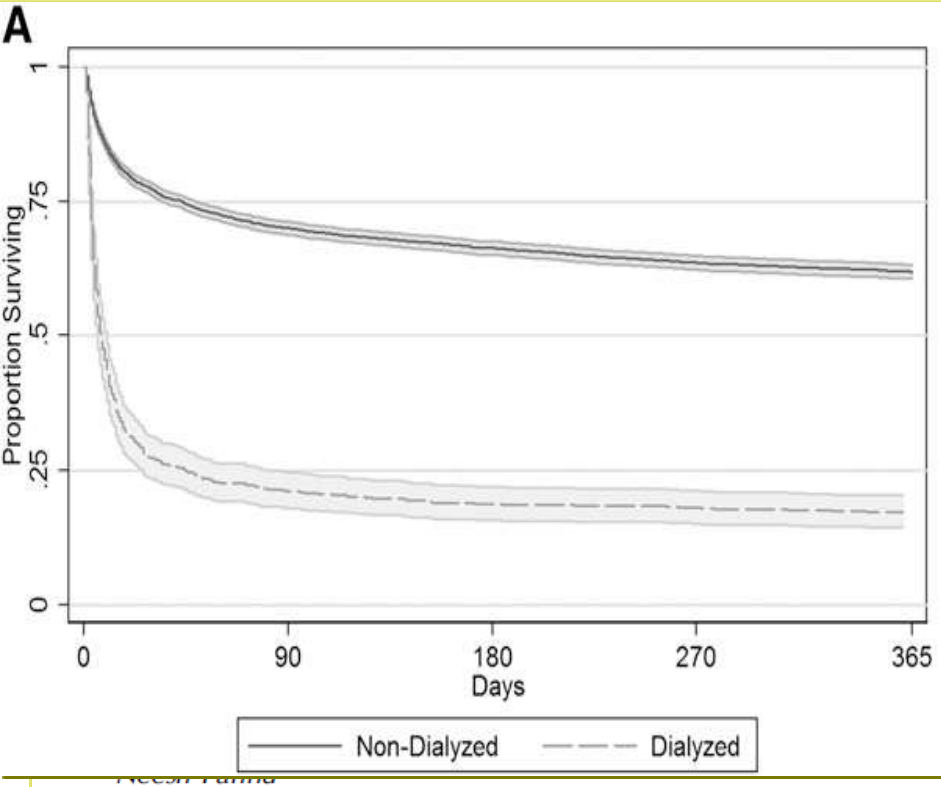
Early or Late Dialysis in AKI?

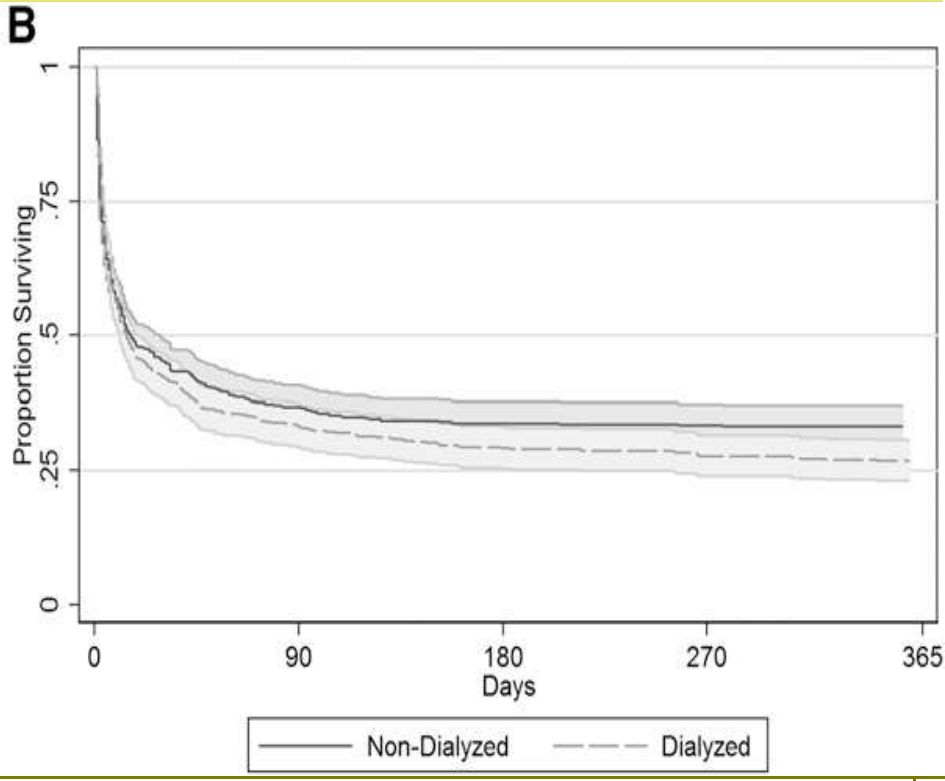


Am J Kidney Dis. 2013;62(6):1116-1121

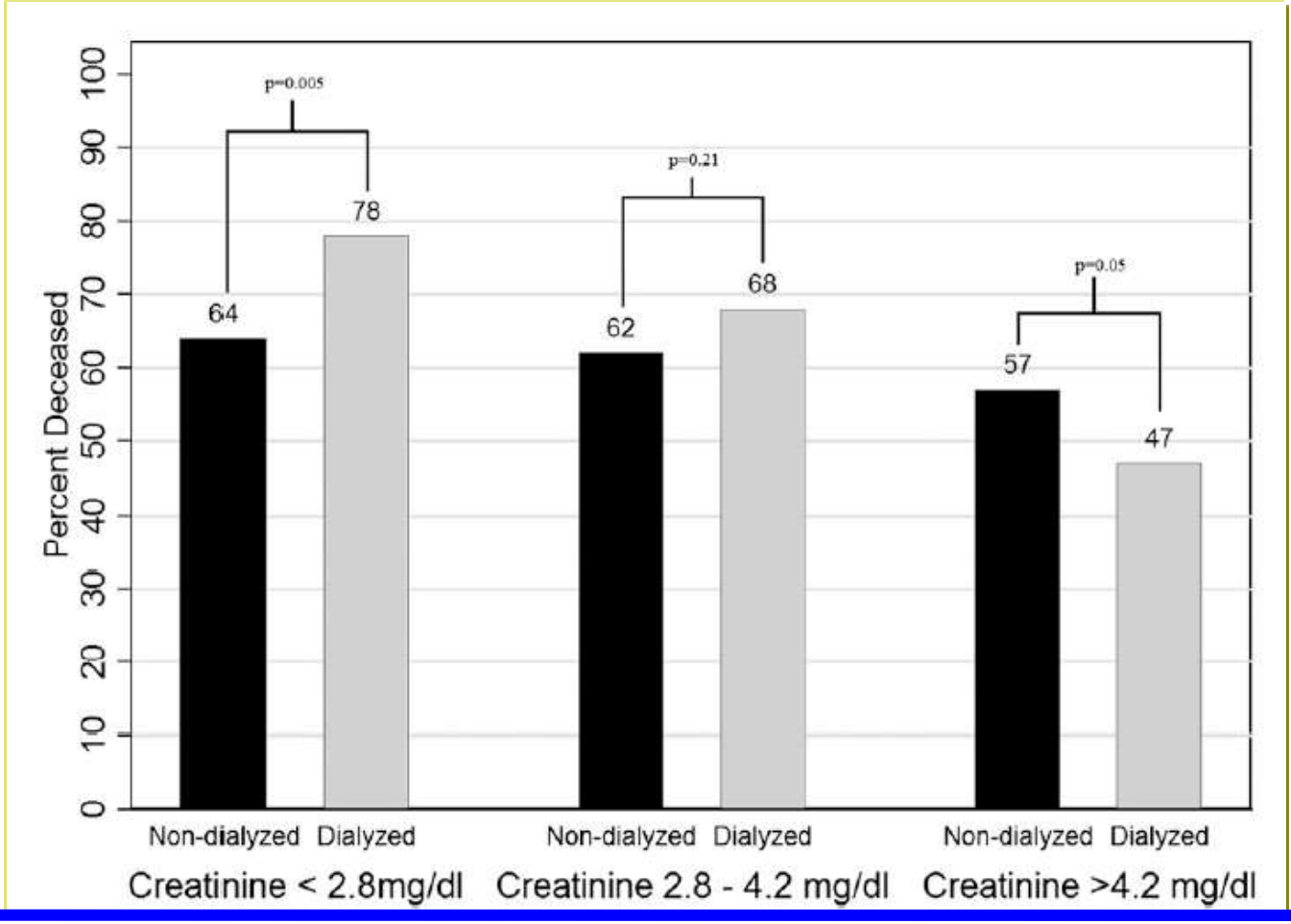
Article

Clin J Am Soc Nephrol 9: 673–681, April 2014.

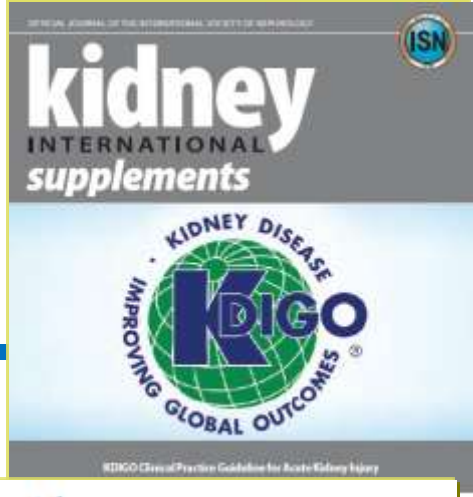




High or low Creatinine at The Start of Dialysis for AKI:
Which is superior?



Clin J Am Soc Nephrol 9: 673–681, April, 2014



5.1.2: Consider the broader clinical context, the presence of conditions that can be modified with RRT, and trends of laboratory tests—rather than single BUN and creatinine thresholds alone—when making the decision to start RRT. *(Not Graded)*

Section 5: Dialysis Interventions for Treatment of AKI

Kidney International Supplements (2012) **2,** 89–115; doi:10.1038/kisup.2011.35

5.1.1: Initiate RRT emergently when life-threatening changes in fluid, electrolyte, and acid-base balance exist. *(Not Graded)*

Wednesday 5th of March

14:30-17:00	CME - Third session	Lecture Hall

Moderators (In Alphabetic order):

www.esnt2014.com

Prof. Hussein Sheashaa

14:50-15:10	When to start dialysis: Early or late? ***Tarek Tantawy***	***Mahala***

What is the Impact of Thyroid Dysfunction on The Following Transporters?

Na^+-K^+ ATPase

H^+-ATPase

SCIENCE IN RENAL MEDICINE www.jasn.org

The Renal Manifestations of Thyroid Disease

Laura H. Mariani and Jeffrey S. Berns

Renal, Electrolyte, and Hypertension Division, Perelman School of Medicine at the University of Pennsylvania, Philadelphia, Pennsylvania

Na^+-Ca^{2+} exchanger

Cl^- channel

AQP 1 and 2

J Am Soc Nephrol 23: 22–26, 2012.

Thyroid and Kidney

Hypothyroidism

- Increased serum creatinine
- Decreased GFR
- Decreased RBF
- Decreased Na reabsorption
- Decreased renal ability to dilute urine
- Hyponatreamia

Hyperthyroidism

- Decreased serum creatinine
- Increased GFR
- Increased RBF
- Increased Na reabsorption
- Resistance to rh Epo action

Effect of Drugs

Immunological

Thyroid and Kidney

Editorial

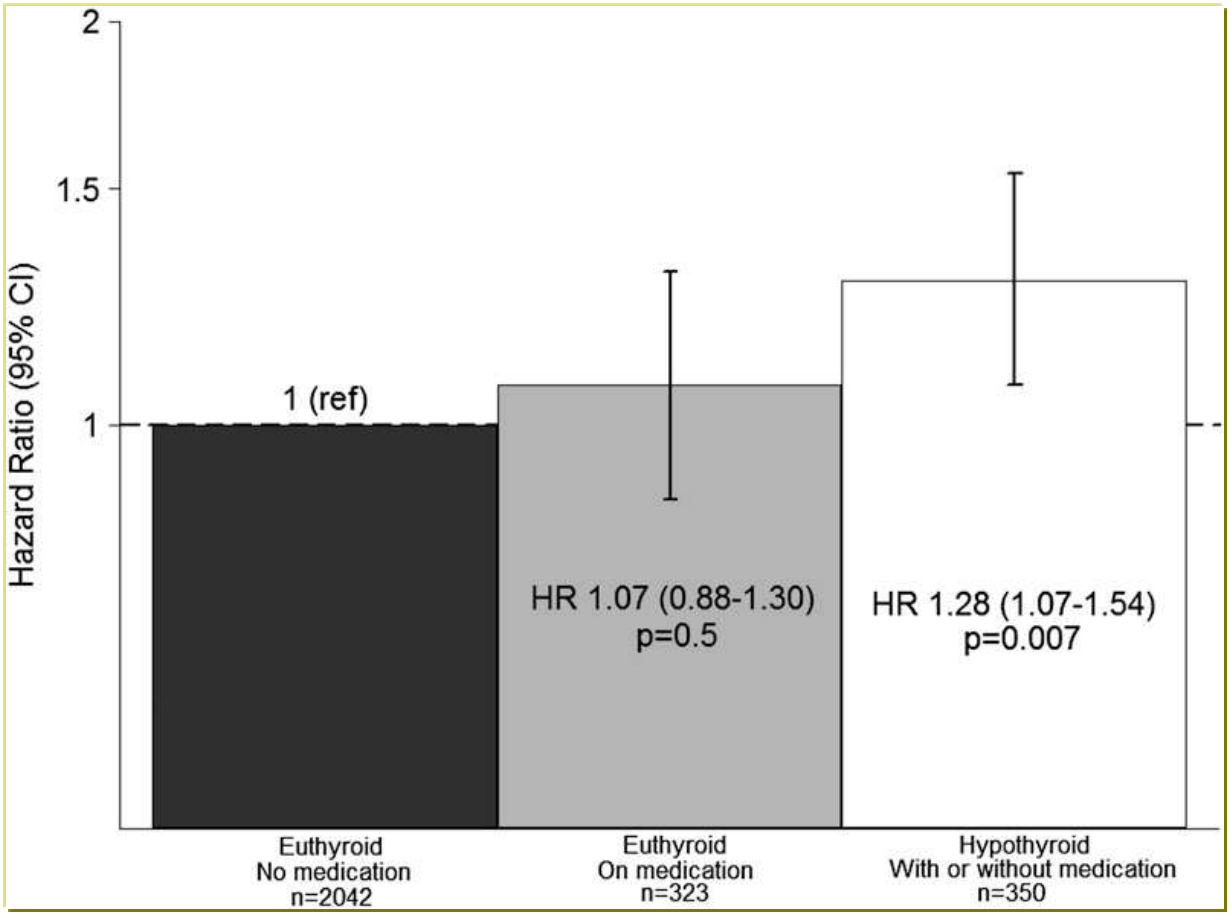
Thyroid Function and Clinical Outcomes in Kidney Failure

Carmine Zoccali and Francesca Mallamaci

Clin J Am Soc Nephrol 7: 12–14, 2012.

Cardiovascular Disease, Mortality, and Low T3 in Kidney Failure

Thyroid and Kidney



Clin J Am Soc Nephrol 8: 593–601, April 2013.

Case Scenario

- A 64-year-old woman with end-stage renal disease and retinopathy secondary to type 2 diabetes mellitus presented with recurrent episodes of left ocular pain and acute loss of visual acuity during hemodialysis.

What is your differential diagnosis?

How to Manage?

- **Several local and systemic antiglaucoma drugs were administered without improvement of intraocular pressure, resulting in the necessity of a glaucoma drainage device (Ahmed valve).**
- **Due to a local infection, it had to be removed, after which intraocular pressure elevations recurred during hemodialysis.**

AJKD

Case Report

Management of Intraocular Hypertension During Hemodialysis by Intravenous Glucose Administration

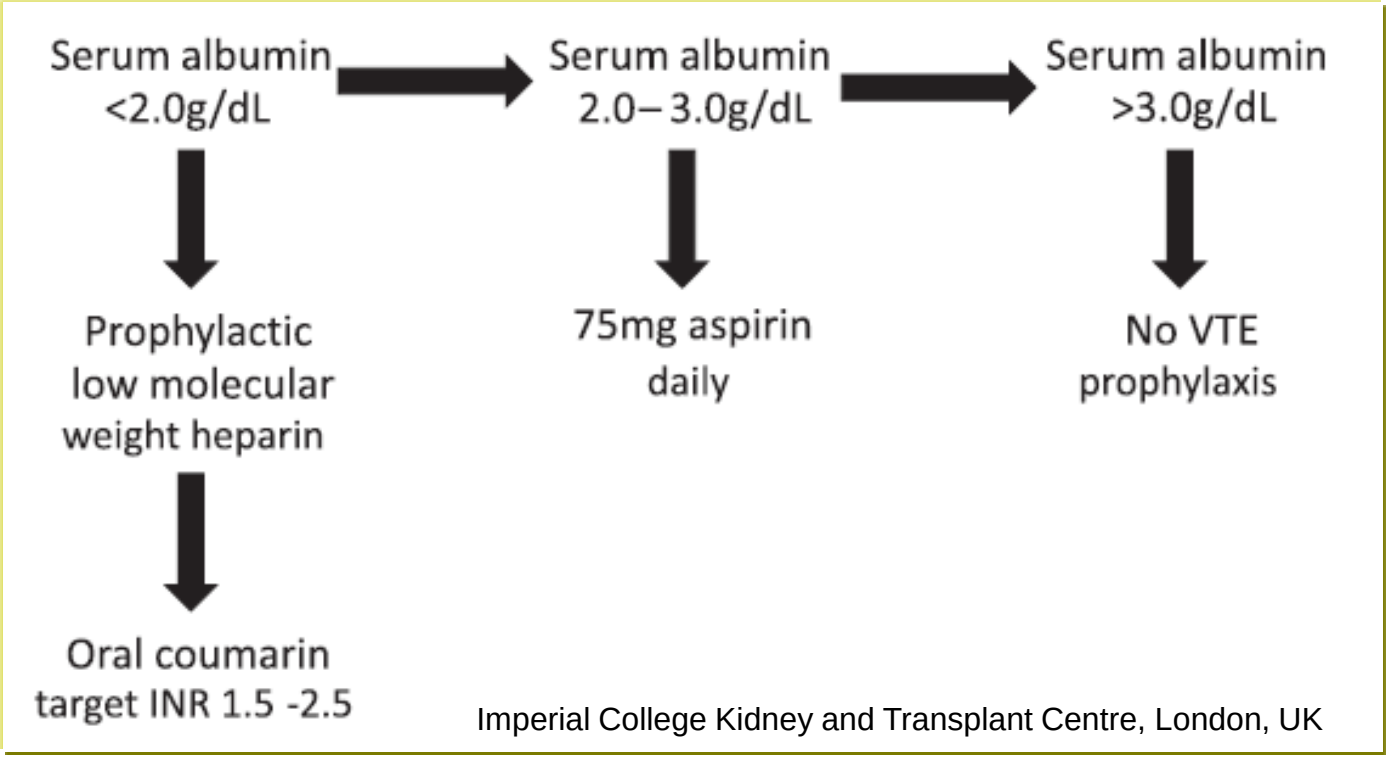
Turgay Saritas, MD,[1] Antonis Koutsonas, MD,[2] Peter Walter, MD,[2] Jürgen Floege, MD,[1] and Thilo Krüger, MD[1]

A 64-year-old woman with end-stage renal disease and retinopathy secondary to type 2 diabetes mellitus presented with recurrent episodes of left ocular pain and acute loss of visual acuity during hemodialysis. During these episodes, markedly elevated intraocular pressures were measured. Several local and systemic antiglaucoma drugs were administered without improvement of intraocular pressure, resulting in the necessity of a glaucoma drainage device (Ahmed valve). Due to a local infection, it had to be removed, after which intraocular pressure elevations recurred during hemodialysis. Assuming that intraocular changes in osmolality during hemodialysis caused the intraocular pressure increases, intradialytic administration of a 20% glucose solution (100 mL/h) was initiated. This completely abrogated the development of both intraocular pain and increases in intraocular pressure.

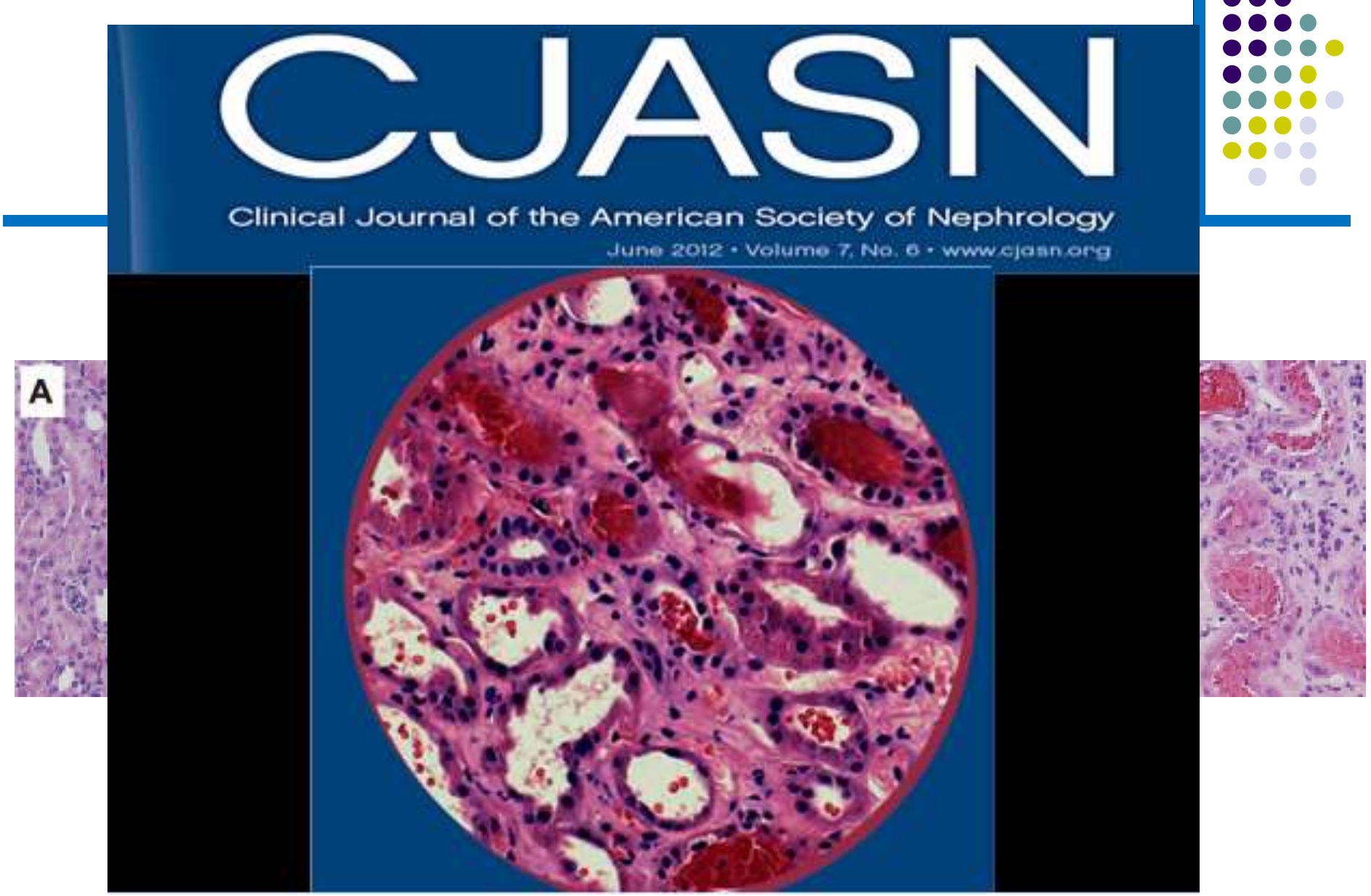
Am J Kidney Dis. March 2014;63(3):500-502

Retrospective Analysis of a Novel Regimen for the Prevention of Venous Thromboembolism in Nephrotic Syndrome

Nicholas Medjeral-Thomas, Stela Ziaj, Marie Condon, Jack Galliford, Jeremy Levy, Tom Cairns, and Megan Griffith



Clin J Am Soc Nephrol 9: 478–483, March 7th, 2014.



J Am Soc Nephrol 22: 1856–1862, 2011.

ASN In The Loop

ASN LEADING THE FIGHT AGAINST KIDNEY DISEASE

In Affiliation With BulletinHealthcare

Customized Briefing for Hussein Sheashaa MD

Wednesday, April 16, 2014

Doctors Practice Surgery on 3D-Printed Kidneys before Treating Patients

Surgeons are using printed transparent 3D models of kidneys from patients with kidney cancer to simulate surgery before doing it for real. By first practicing on a 3D-printed kidney, surgeons were able to remove less renal tissue and reduce blood supply interruption, in one case to just 8 minutes compared with a normal average time of 22 minutes. The findings, presented at the European Association of Urology congress and highlighted in a press release, suggest 3D printing has the potential to become an important surgical training tool.

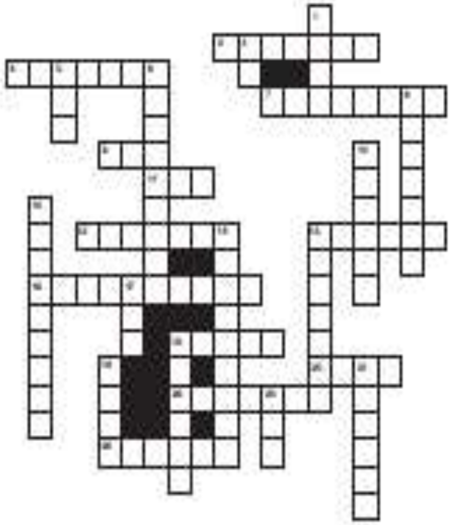
Kidney International (2010) 78, 713–714; doi:10.1038/ki.2010.203

Nephrology Crossword: **Natremias**

Kellie Calderon[1], Tamim H. Naber[1] and Kenar D. Jhaveri[1]

[1]North Shore/Long Island Jewish Medical Center, Division of Kidney Diseases and Hypertension, Department of Internal Medicine, Hofstra Medical School, Great Neck, New York, USA

Correspondence: Kenar D. Jhaveri, North Shore/Long Island Jewish Medical Center, Division of Kidney Diseases and Hypertension, Department of Internal Medicine, Hofstra Medical School, Great Neck, NY 11021, USA. E-mail: [illegible]



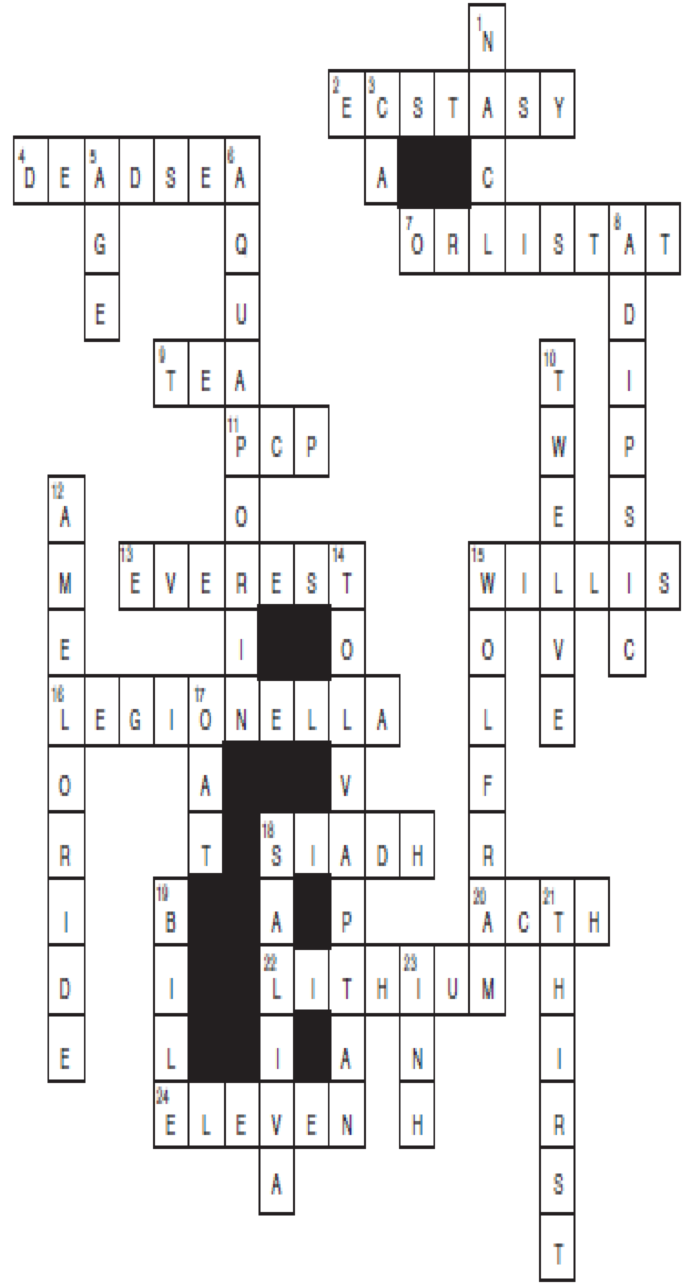
ACROSS

2. [illegible]
4. [illegible]
7. [illegible]
9. [illegible] (_____ and toast) diet
11. [illegible]
13. [illegible]
15. [illegible]
16. [illegible]
18. [illegible]
20. A _____ [illegible]
22. [illegible]
24. [illegible]

DOWN

1. [illegible]
3. [illegible]
5. [illegible]
6. [illegible]
8. [illegible] _____ [illegible]
10. [illegible]
12. [illegible]
14. [illegible]
15. _____ [illegible]
17. _____ [illegible] _____ [illegible]
18. Bodily fluid that has the least sodium concentration
19. Bodily fluid that has the highest sodium concentration
21. [illegible]
23. [illegible]

Nephrology Crossword Answers: **Natremias**

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وصار الكنانةُ عينُ الله تحرسُكم
من كلِّ سوءٍ بدا في الأفق واقتربا
فلتهنأ العيشة في أمنٍ يُجلِّلُكم
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2013-12-26 / المنصورة

Thank You

Thank You